RAVALLI COUNTY ENVIRONMENTAL HEALTH DEPARTMENT
215 S. 4th STREET, SUITE D
HAMILTON, MT 59840
(406) 375-6565, Fax 375-6566

Amount Paid: _____Receipt #_____

GROUND WATER MONITORING APPLICATION - DEADLINE: MARCH 1

Applicant's name: _____ Date: _____

Applicant's mailing address name:_____ _____ Phone:_____

City: _____ State: _____ Zip Code: _____

Contact Telephone: _____ (who we call if there is a problem)

B. Information about the property:

TAX ID: _____

GEOCODE: _____

Property Owner _____

Size of lot or parcel _____

Number of monitoring pipes _____

Ear Tag Numbers _____

Distance from Hamilton to parcel _____

Closest Town _____

The groundwater monitoring pipes must be:

- At least 100 ft from wells
- At least 10 ft from water lines
- At least 100 ft from floodplain
- At least 100 ft from surface water
- At least 10 ft from property lines
- At least 10 ft from buildings
- Placed in natural ground (not fill)
- Be 10 feet long
- Be 4 inches in diameter
- Perforated
- Placed at least 8 feet in the ground
- Accessible

Please provide the following information for each monitoring pipe on a **parcel map** obtained from this office and attached to this application:

- The location of each pipe with the assigned ear tag ID number
- The site evaluation number for each location
- The distance (in feet) from the pipe (s) to the access road
- The route and distance (in feet) to be taken to each pipe
- Please label all roads, ditches, stream crossings, and access points

Additional information: _____

☐ I have read the attached requirements and understand that the failure to comply may result in the termination of monitoring of one or all test pipes. Any tampering with the pipes is subject to penalties and could make the results void.

☐ RCEH may reject ground water monitoring results during a drought year, or if monitoring was not conducted during the time of year to detect seasonally high groundwater. RCEH may also reject results if site conditions exist during monitoring that are not typical of the property or if monitoring pipes are not installed appropriately.

☐ I understand a site evaluation is necessary to obtain an on site sewage treatment disposal permit.

Applicant's name: _____ Phone: _____ Date: _____

Applicant's Signature _____ Relationship to Owner: _____

GROUNDWATER MONITORING FEE: $150.00 (one test pipe); additional pipes: $30.00 each; See fee schedule for one time mileage fees.

RAVALLI COUNTY ENVIRONMENTAL HEALTH
GROUNDWATER MONITORING

WHEN TO GROUNDWATER MONITOR

The Department may require groundwater monitoring on a site if there's reason to believe groundwater will be within 7 feet of the surface at any time of the year in the area of the proposed drainfield.

A site evaluation is required prior to the issuance of a wastewater (septic) treatment permit, and **we strongly recommend the site evaluation be conducted prior to groundwater monitoring to verify that the site is suitable for a drainfield.**

If a site passes groundwater monitoring, the drainfield must be placed within 25 feet of the monitoring pipe at the same or higher elevation, and it must not be placed in the direction surface water. Even if a site has already passed groundwater monitoring, a site evaluation may determine that it is not suitable for a drainfield.

Having a site evaluation before groundwater monitoring helps ensure the monitoring pipe is placed in the right location and that soils are appropriate for a drainfield.

PIPE LOCATION

Groundwater monitoring pipes must be AT LEAST:

- 100 feet from wells
- 100 feet from surface water, including irrigation ditches, ponds and streams
- 100 feet from 100-year floodplain
- 10 feet from water lines
- 10 feet from property lines
- 10 feet from buildings

No ground modifications are allowed anywhere in the vicinity of the pipe. An area of at least 100 feet surrounding the pipe must not be artificially drained, filled, cut, or otherwise disturbed or altered. The pipe must be at least 50 feet from a slope of 25% or greater and not located on a slope of greater than 15% unless an engineered system is proposed for slopes greater than 15% and less than 25%.

IRRIGATION

Groundwater monitoring results can be affected by irrigation, not only on the property being monitored but on neighboring property as well. Be aware of any irrigation practices in the area.

If normal irrigation practices are altered during the groundwater monitoring period, those conditions would have to remain for the monitoring results to remain valid. For instance, if a ditch is turned off during the monitoring season, it would need to be removed in order to install a drainfield.

INSTALLING THE PIPES

- A four-inch (4") diameter, ten-foot (10') long, perforated PVC pipe must be placed vertically at least eight feet (8') below the natural ground surface. Please make sure the pipe is as level as possible.
- Backfill around the pipes must be level with the natural existing topography of the site. Please do not mound soil around the pipe or bend the pipe during backfilling.

Any tampering with the pipes or adding material that would interfere with monitoring or change the results may subject you to penalties and could void the monitoring results and void any permits issued based on these results.

MARKING THE PIPES

- All monitoring pipes must have the assigned ear tag attached to the top of the pipe with the numbers facing outward and easily readable.
- If you are growing a crop that will obscure the pipe during the monitoring season, please make sure you have marked the pipe with ribbon, flagging, or other means. If the pipe cannot be located, monitoring may be terminated, in which case it would be necessary to monitor in a subsequent year.

ACCESSING THE PIPES

Access to pipes must be provided by the landowner throughout the monitoring season. We must be able to drive safely to within 100 feet of each pipe. Please provide access gates that are clearly marked and easy to open. If you are growing a crop, the weekly visits may likely create a temporary access road to each pipe. If this is a problem, you may want to wait to monitor the site in another year when you are no longer growing a crop.

You must provide marked crossings for all irrigation ditches or drainages. County vehicles are not equipped to cross open irrigation ditches, irrigation pipes, open water, drainages, streams, or channels. If the field is wet or muddy, please provide suitable road material to provide access to the pipes and prevent vehicles from getting stuck

DAMAGED PIPES

During the monitoring season, if a pipe is damaged for any reason, you must repair or replace it before the next weekly visit. If two successive monitoring dates are missed because of the damage, monitoring results may be deemed inconclusive and require the monitoring to be repeated during a subsequent year. Ravalli County will not be responsible or liable for damage to any monitoring pipe, irrigation pipe or equipment left unmarked in the monitoring area.

Livestock may rub against a monitoring pipe, often damaging or destroying the pipe or the ear tag. We suggest using steel posts and wires to protect the pipe or cutting the pipe *so less than* 10 inches is exposed above the ground.

MONITORING THE PIPES

Monitoring usually begins in March, and we encourage you to check the water level in the monitoring pipe periodically to know the status of your monitoring.

At the beginning of the monitoring season, we will mark the pipes with spray paint or ribbon to verify that we have located the correct pipes. If a pipe has not been marked by April 1, please contact us.

Measurements to the groundwater level will be taken weekly until the level rises to less than 48 inches from the surface of the ground (at which point the pipe fails) or until the groundwater level peaks and goes through a sustained decline. The seasonal peak for spring runoff can be anywhere from March to mid- July. Areas that are irrigated or located near the larger irrigation ditches or flood-irrigated fields may be monitored into October.

Monitoring results may be void if the yearly precipitation or snow pack in the Bitterroot Valley is more than 25% below the 30-year average.

END OF MONITORING

Groundwater monitoring ends when the applicant receives **WRITTEN** notification from our office. Results remain valid in future years unless site conditions change in a way that could affect the level of groundwater (see example below).

REASONS RESULTS MAY NOT BE VALID

The Department may reject groundwater monitoring information during a drought year in accordance with Appendix C of Circular DEQ-4; or if historic information is available that indicates a high groundwater situation; or if monitoring was not conducted during the time of year to detect the seasonally high groundwater level; or if site conditions exist that are not typical to the property.

An example of site conditions being atypical would be a property where normal irrigation practices have been altered or suspended during the monitoring season and then resumed after monitoring is completed.